

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

**NORTHEAST UTILITIES SERVICE  
COMPANY APPLICATION TO THE  
CONNECTICUT SITING COUNCIL  
FOR A CERTIFICATE OF  
ENVIRONMENTAL COMPATIBILITY  
AND PUBLIC NEED (“CERTIFICATE”)  
FOR THE CONSTRUCTION OF A  
NEW 345-KV ELECTRIC TRANSMISSION  
LINE FACILITY AND ASSOCIATED  
FACILITIES BETWEEN SCOVILL  
ROCK SWITCHING STATION IN  
MIDDLETOWN AND NORWALK  
SUBSTATION IN NORWALK, INCLUDING  
THE RECONSTRUCTION OF PORTIONS  
OF EXISTING 115-KV AND 345-KV  
ELECTRIC TRANSMISSION LINES,  
THE CONSTRUCTION OF BESECK  
SWITCHING STATION IN  
WALLINGFORD, EAST DEVON  
SUBSTATION IN MILFORD, AND  
SINGER SUBSTATION IN BRIDGEPORT,  
MODIFICATIONS AT SCOVILL ROCK  
SWITCHING STATION AND NORWALK  
SUBSTATION, AND THE  
RECONFIGURATION OF CERTAIN  
INTERCONNECTIONS**

**DOCKET NO. 272**

**JANUARY 7, 2005**

**PRE-HEARING QUESTIONS TO KEMA, INC.  
FROM THE TOWNS OF WOODBRIDGE AND ORANGE,  
AND THE CITY OF MILFORD**

The Towns of Woodbridge and Orange and the City of Milford (collectively the “Towns”) submit the following Pre-Hearing Questions to KEMA, Inc. in connection with the Application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need for the construction of a new 345-kV electric transmission line facility and associated facilities between Scovill Rock Switching Station in Middletown and Norwalk Substation in Norwalk, including the reconstruction of portions of existing 115-kV and 345-kV electric transmission lines, the construction of Beseck Switching Station in Wallingford, East Devon Substation in Milford, and Singer Substation in Bridgeport, modifications at Scovill Rock Switching Station and Norwalk Substation, and the reconfiguration of certain interconnections (the “Application”). The Towns request that KEMA, Inc. respond on or before *January 11, 2005*.

1. Please identify the studies that would be required for KEMA, Inc. to evaluate and mitigate transients and harmonics concerns identified in the Final Report of the Reliability and Operability Committee dated December 20, 2004 (the "Final Report"), in order to enable the Siting Council to consider a route consisting of "Case 5" (as defined in the Final Report), plus an additional 15 miles of underground cables, originating from the East Devon substation through Milford, Orange, and Woodbridge, and terminating on property owned by CL&P in Woodbridge near the intersection of Route 63 and Clark Road.
2. With respect to your answer to interrogatory #1, please state the amount of time that KEMA, Inc. would need to perform these studies.
3. Please identify the studies that would be required for KEMA, Inc. to evaluate and mitigate transients and harmonics concerns identified in the Final Report of the Reliability and Operability Committee dated December 20, 2004 (the "Final Report"), in order to enable the Siting Council to consider a route consisting of "Case 5" (as defined in the Final Report), plus an additional 3.5 miles of underground cables, through the town of Woodbridge from a point in Southern Woodbridge, beneath public streets, until reaching property owned by CL&P near the intersection of Route 63 and Clark Road. The underground route would traverse Northerly from Johnson Road, to Pease Road, then East on Route 114, across Route 63, North on Cedar Road or Route 63, until reaching CL&P's property.
4. With respect to your answer to interrogatory #3, please state the amount of time that KEMA, Inc. would need to perform these studies.
5. Please identify the studies that would be required for KEMA, Inc. to evaluate and mitigate transients and harmonics concerns identified in the Final Report of the Reliability and Operability Committee dated December 20, 2004 (the "Final Report"), in order to enable the Siting Council to consider a route consisting of "Case 5" (as defined in the Final Report), plus an additional 9 miles of underground cables, originating from the East Devon substation through Milford beneath public streets to a location near the Milford/Orange line.
6. With respect to your answer to interrogatory #5, please state the amount of time that KEMA, Inc. would need to perform these studies.

7. Does Kema, Inc. have expertise on the issue of split phasing of overhead 345-kV transmission lines as a method of mitigating electromagnetic fields, and the issue of the reliability of EMF calculations, with and without split phase design?
  - a. If yes, does KEMA, Inc. have the ability to assess the accuracy of the applicants' EMF calculations provided in this docket, that purport to implement such mitigation?
  - b. If yes, how much time would KEMA, Inc. require in order to study the applicants' EMF calculations in this docket?